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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,829	08/01/2005	Stephen A. Payne	30101.188	2411

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EXAMINER

KHAN, AMINA S

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 12/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/521,829

Applicant(s)

PAYNE, STEPHEN A.

Examiner

Amina Khan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/21/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4,6,7,13-16,18 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Rother et al. (US 2002/0066879).

The prior art of Rother et al. teaches the treatment of leathers with antimicrobial compositions (page 2, paragraph 0050) comprising bactericides, specifically triclosan (page 1, paragraph 0005) and fungicides, specifically di-iodo-methyl p-tolyl sulfone

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(page 1, paragraph 0004) which combined make up 10-50% of the composition (page 2, paragraph 0049). Rother teaches that the compositions further comprise 0-20% ionic and/or nonionic emulsifiers (page 2, paragraph 0049). Rother further teaches compositions having 5 to 200 parts by weight bactericide to 1 part by weight fungicide (columns 1 and 2, paragraph 0045), which meets the claimed limitation of 1:50 to about 10:1 fungicide to bactericide. Rother further teaches that the composition be applied in a concentration of 0.1 to 1% based on the quantity of animal hides or leather (page 3, claim 7), which based on the percentage of bactericide and fungicide in the composition and the ratio of bactericide to fungicide meets the claimed limitation of 200-5000 ppm fungicide and 500-10000 ppm bactericide.

The teachings of Rother et al. anticipate the material limitations of the instant claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rother et al. (US 2002/0066879) in view of Austin (US 5,290,810).

The primary reference of Rother et al. is relied upon as set forth above. Rother does not teach leathers and antimicrobial compositions comprising polyhexamethylene biguanide.

The secondary reference of Austin teaches industrial biocides for the treatment of leather (column 1, lines 4-11) comprising known antimicrobial compounds such as polyhexamethylene biguanide (column 6, lines 22-23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the leather treatments of Rother by incorporating polyhexamethylene biguanide as taught by Austin because Austin teaches the utility of polyhexamethylene biguanide as an antimicrobial compound for treating leather. It is prima facie obvious to combine the two compositions, each taught for the same purpose, to yield a third composition for that very purpose. *In re Kerkhoven*, 205 USPQ 1069, *In re Pinten*, 173 USPQ 801, and *In re Susi*, 169 USPQ 423 when ingredients are well known and combined for their known properties, the combination is obvious absent unexpected results.

Claims 8-12 and 20-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rother et al. (US 2002/0066879) in view of Austin (US 5,290,810) in further view of Pillay (US 6,110,950).

The prior art of Rother and Austin are relied upon as set forth above. The prior art does not teach the methods of application of the antimicrobial composition to leather as claimed in claims 8 and 20-39. Rother also does not teach leather efficacy after 5 washings or the AATCC Test Method 30 Part 3. Rother does teach that customary application methods in leather manufacture for the protection of animal hides against attack and damage by microorganisms may be applied (column 2, paragraph 0050).

Pillay in the analogous art of antimicrobial leather treatments teaches methods of treating leathers with microbicides such as propiconazole to control the growth of

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microorganisms on a hide during the tanning process (column 5, lines 37-39). Pillay further teaches that microbicidal compositions may be applied at any stage during a tanning process that includes, but is not limited to, a pickling stage, a chrome-tanning stage, a vegetable-tanning stage, a retanning stage, a dyeing stage, and a fat liquoring stage (column 5, lines 52-59). Pillay does not specifically disclose exhausting the treatment to the leather but in example 1 (page 8) describes a method in which hides are drummed with the compositions until they penetrate the leather, the equivalent of exhausting. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rother by incorporating the methods taught by Pillay because Pillay teaches the utility of these methods in providing an antimicrobial finish for leather. Furthermore, Rother invites the inclusion of customary application methods of antimicrobial compositions to protect leather during tanning.

It would also have been obvious to one of ordinary skill in the art that the leathers exhibit acceptable efficacy after 5 washings and have zero growth of microbes after 5 washings when tested in accordance with AATCC Test Method 30 Part III because the leathers were treated with similar compositions and with similar methods. The burden is on the applicant to prove otherwise.

It would also have been obvious to one of ordinary skill in the art to produce products such as clothing, shoes, etc. with the leather since the leathers disclosed by Pillay are cowhide, snakeskin, alligator skin, sheep skin, and the like, materials commonly made into shoes, belts, coats, handbags, etc. The burden is on the applicant to prove otherwise.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amina Khan whose telephone number is (571) 272-5573. The examiner can normally be reached on Monday through Friday, 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Amina Khan, PhD
Patent Examiner
December 21, 2005



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